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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,799	02/18/2004	Harumi Suzuki	01-553	9628
23400	7590	03/10/2006	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			RAABE, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/779,799

Applicant(s)

SUZUKI ET AL.

Examiner

Christopher M. Raabe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 24-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/18/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Applicant's election without traverse of claims 1-23 in the reply filed on February 7, 2006 is acknowledged.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 15.
Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukuda (USPN 2003/0044639).

With regard to claim 1,

Fukuda discloses an organic electroluminescence display panel comprising: a hole transport layer (42 of fig 5); and a luminescent layer disposed on the hole transport layer (43 of fig 5), wherein the luminescent layer includes at least first and second luminescent layers, wherein the first and second luminescent layers are repeatedly arranged on the hole transport layer so as to be adjacent each other (43R, 43G of fig 5), wherein the first luminescent layer includes a first dopant for emitting a first light having a first wavelength, and the second luminescent layer includes a second dopant for emitting a second light having a second wavelength, which is shorter than the first wavelength (paragraph 98, and table 1), and wherein no first dopant is disposed between the hole transport layer and the second luminescent layer (43G, 43R of fig 5).

With regard to claim 2,

Fukuda discloses the display panel, further comprising: a substrate (2 of fig 5); an anode layer (3 of fig 5); an electron transport layer (44 of fig 5); and a cathode layer (5 of fig 5), wherein the anode layer, the hole transport layer, the luminescent layer, the electron transport layer and the cathode layer are disposed on the substrate in this order (fig 5).

With regard to claim 3,

Fukuda discloses the display panel, wherein the hole transport layer includes a plurality of parts of the hole transport layer (42R, 42G of fig 5).

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With regard to claim 4,

Fukuda discloses the display panel, further comprising: a hole injection layer disposed between the anode layer and the hole transport layer (41 of fig 3).

With regard to claim 5,

Fukuda discloses the display panel, wherein the parts of the hole transport layer include at least first and second part hole transport layers, which correspond to the first and second luminescent layers, respectively (42R, 42G of fig 3). The phrase "and wherein both of the first luminescent layer and the first part hole transport layer are formed independently from the second luminescent layer and the second part hole transport layer" does not structurally distinguish the claimed invention from the prior art, as is required of apparatus claims (MPEP 2114).

With regard to claim 6,

Fukuda discloses the display panel, wherein one of the first and second luminescent layers and one part of the hole transport layer corresponding to the one of the first and second luminescent layers are successively formed so that no dopant of the other one of the first and second luminescent layers is disposed between the one part of the hole transport layer and the one of the first and second luminescent layers (43G, 42G, 43R, 42R of fig 5).

With regard to claim 7,

Fukuda discloses the display panel. The phrase "wherein the first luminescent layer is formed with using a time-sharing method before the second luminescent layer is formed" does

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not structurally distinguish the claimed invention from the prior art, as is required of apparatus claims (MPEP 2114).

With regard to claim 8,

Fukuda discloses the display panel, wherein the luminescent layer further includes a third luminescent layer (43B of fig 5), which includes a third dopant for emitting a third light having a third wavelength (paragraph 98, and table 1), wherein the first light is a red light, the second light is a green light, and the third light is a blue light, and wherein the first, second and third luminescent layers are repeatedly arranged on the hole transport layer so as to be adjacent together (43R, 43G, 43B of fig 5).

With regard to claim 9,

Fukuda discloses the display panel, wherein no first dopant is disposed between the electron transport layer and the second luminescent layer (43R, 43G, 44G of fig 5).

With regard to claim 10,

Fukuda discloses the display panel, wherein the electron transport layer includes a plurality of parts of the electron transport layer (44R, 44G, 44B of fig 5).

With regard to claim 11,

Fukuda discloses the display panel, further comprising: a hole injection layer disposed between the anode layer and the hole transport layer (41 of fig 3).

With regard to claim 12,

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Fukuda discloses the display panel, wherein the parts of the electron transport layer include at least first and second part electron transport layers, which correspond to the first and second luminescent layers, respectively (44R, 43R, 44G, 43G of fig 5). The phrase “and wherein both of the first luminescent layer and the first part electron transport layer are formed independently from the second luminescent layer and the second electron transport layer” does not structurally distinguish the claimed invention from the prior art (MPEP 2114).

With regard to claim 13,

Fukuda discloses the display panel, wherein one of the first and second luminescent layers and one part of the electron transport layer corresponding to the one of the first and second luminescent layers are such that no dopant of the other one of the first and second luminescent layers is disposed between the one part of the electron transport layer and the one of the first and second luminescent layers (44R, 43R, 44G, 43G of fig 5). The phrase “are successively formed” does not structurally distinguish the claimed invention from the prior art, as is required of apparatus claims (MPEP 2114).

With regard to claim 14,

Fukuda discloses the display panel. The phrase “wherein the second luminescent layer is formed on the hole transport layer with using a time-sharing method before the first luminescent layer is formed on the hole transport layer” does not structurally distinguish the claimed invention from the prior art, as is require of apparatus claims (MPEP 2114).

With regard to claim 15,

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Fukuda discloses the display panel, wherein the luminescent layer further includes a third luminescent layer (43B of fig 5), which includes a third dopant for emitting a third light having a third wavelength (paragraph 98, and table 1), wherein the first light is a red light, the second light is a green light, and the third light is a blue light, and wherein the first, second and third luminescent layers are repeatedly arranged on the hole transport layer so as to be adjacent together (43R, 43G, 43B of fig 5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda.

With regard to claim 16,

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Fukuda discloses an organic electroluminescence display panel comprising: a hole transport layer (42 of fig 5); and a luminescent layer disposed on the hole transport layer (43 of fig 5), wherein the luminescent layer includes at least first and second luminescent layers, wherein the first and second luminescent layers are repeatedly arranged on the hole transport layer so as to be adjacent each other (43R, 43G of fig 5).

Fukuda does not disclose at least one of the first and second luminescent layers including a hole transporting material as a host material. However, hole transporting materials were well known and widely used by those of ordinary skill in the art at the time of the invention as excellent host material for a luminescent layer in an organic electroluminescence display panel, and hence would have been obvious to incorporate into the display panel of Fukuda.

With regard to claim 17,

Fukuda discloses the display panel, further comprising: a substrate (2 of fig 5); an anode layer (3 of fig 5); an electron transport layer (44 of fig 5); and a cathode layer (5 of fig 5), wherein the anode layer, the hole transport layer, the luminescent layer, the electron transport layer and the cathode layer are disposed on the substrate in this order (2,3,42,43,44,5 of fig 5), and wherein the first luminescent layer includes a first dopant for emitting a first light having a first wavelength, and the second luminescent layer includes a second dopant for emitting a second light having a second wavelength, which is shorter than the first wavelength (paragraph 98, and table 1).

With regard to claim 18,

Fukuda discloses the display panel, wherein the hole transporting material of the one of the first and second luminescent layers is disposed at an interface between the other one of

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the first and second luminescent layers and the hole transport layer (42R, 43R, 42G, 43G of fig 5).

With regard to claim 19,

Fukuda discloses the display panel, wherein the interface further includes an electron transporting material (44 of fig 5) for composing the other one of the first and second luminescent layers (table 1).

With regard to claim 20,

Fukuda discloses the display panel. The phrase "wherein the second luminescent layer is formed on the hole transport layer with using a time-sharing method before the first luminescent layer is formed on the hole transport layer" does not structurally distinguish the claimed invention from the prior art, as is require of apparatus claims (MPEP 2114)

With regard to claim 21,

Fukuda discloses the display panel, wherein the luminescent layer further includes a third luminescent layer (43B of fig 5), which includes a third dopant for emitting a third light having a third wavelength (paragraph 98, and table 1), wherein the first light is a red light, the second light is a green light, and the third light is a blue light, and wherein the first, second and third luminescent layers are repeatedly arranged on the hole transport layer so as to be adjacent together (43R, 43G, 43B of fig 5).

With regard to claim 22,

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Fukuda discloses the display panel, wherein the electron transport layer is made of an electron transporting material having an ionization potential, and wherein the hole transporting material in the one of the first and second luminescent layers has another ionization potential (44,42 of fig 5) which is 0.2 eV lower than that of the electron transporting material in the electron transport layer (table 1).

With regard to claim 23,

Fukuda discloses the display panel, wherein both of the first and second luminescent layers are made of the electron transporting material as a host material (table 1).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 2003/0068524, 2002/0034657, 2002/0160296.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Raabe whose telephone number is 571-272-8434. The examiner can normally be reached on m-f 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CR


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